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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,839	08/27/2003	Gerd Auerswald	071308.0469	7022
31625	7590	07/21/2004	EXAMINER	
BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039			NGUYEN, DAO H	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/649,839	AUERSWALD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dao H Nguyen	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. In response to the communications dated 08/07/2003 through 05/03/2004, claims 1-9 are active in this application.

### **Acknowledges**

2. Receipt is acknowledged of the following items from the Applicant.

Information Disclosure Statement (IDS) filed on 08/27/2003 and made of record as Paper No. 0803. Some of the references cited on the PTOL 1449 form have been considered. The others have not been considered because no translation of the references provided by Applicant.

Applicant is requested to cite any relevant prior art if being aware on form PTO-1449 in accordance with the guidelines set for in M.P.E.P. 609.

### **Foreign Priority**

3. Acknowledgment is made of applicant's claim for foreign priority based on International Application No. PCT/DE02/00601 filed February 20, 2002 and claiming priority upon Germany 10109329.2 filed February 27, 2001, which designates the United States.

It is noted, however, that applicant has not filed certified copy/copies of the foreign application(s) as required by 35 U.S.C. 119(b).

### **Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claim(s) 1-4 is/are rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. Patent No. 4,670,833 to Sachs.

Regarding claim 1, Sachs discloses a circuit arrangement, as shown in figures 8-9 and 14, comprising:

a power section, which comprises heat-generating component 84 (which is a transistor) and at least one component 86 (which is a diode) producing less heat,

the component producing less heat 86 being arranged in an internal region of the circuit arrangement, and

the heat-generating components 84/86 being arranged around the internal region and being mounted on at least one metallic body 76/78/82 acting as an electrical conductor, said body being electrically connected to the heat-generating components,

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wherein the body is arranged in an electrically insulating manner in the region of the heat-generating components on a heat sink 74, in order to cool the heat-generating components, and wherein

the heat sink 74 is embodied running around the internal region with the components producing less heat. See figs. 8-9.

Regarding claim 2, Sachs discloses the circuit arrangement further comprising: a logic section (126/138/140/142), which is arranged above the internal region, wherein the logic section being electrically connected to the power section via bonding connections. See fig. 8.

Regarding claim 3, Sachs discloses the circuit arrangement further comprising: a metallic board 100, which covers the internal region and is arranged above the component producing less heat, wherein the board 100 having at least one opening 102-110 above the internal region and the component producing less heat being electrically connected to the board via a first wired bond 88-96, which is led through the opening,

a carrier 130/134, which is arranged in an electrically insulating manner above the internal region and above the board 100,

wherein the surface of the carrier facing the board having an indentation in the region of the first wired bond, to accommodate the first wired bond, wherein the surface of the carrier facing away from the board being essentially flat, and

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wherein the logic section being arranged in an electrically insulating manner on the surface of the carrier facing away from the board. See fig. 8.

Regarding claim 4, Sachs discloses the circuit arrangement, wherein the carrier being essentially made of aluminum. See fig. 8.

### **Allowable Subject Matter**

6. Claim(s) 5-9 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, since the prior art of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed circuit arrangement in which the first chips being mounted on a first metallic body and the second chips being mounted on a second metallic body, wherein the first body being embodied as a bar, which runs along the outer edge of the heat sink, and the second body being embodied as a board, which covers the internal region and inner edge of the heat sink.

### **Conclusion**

7. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao H. Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday, 9:00 AM – 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax numbers for all communication(s) is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.



Dao H. Nguyen  
Art Unit 2818  
July 14, 2004



David Nelms  
Supervisory Patent Examiner  
Technology Center 2800